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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,669	02/25/2002	Norihiko Kaga	219879US0	8162
22850	7590	02/10/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER	
			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/080,669

Applicant(s)

KAGA, NORIHIKO

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/04/03.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 6, 9, and 13 are objected to because of the following informalities:

Claim 6, line 2, "polybuthylene" should be changed to --polybutylene--; claim 9, line 2, "elastomer" should be changed to --elastomer--; claim 13, line 1, "claim 1 or 2" should be changed to --claim 1 or 2--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (US Pat. 6,175,712) in view of Niimi (US Pat. 6,132,911).

Masuda teaches an image formation apparatus comprising a seamless belt 20b. The belt 20b comprises an elastic layer 201 and a coating layer 202; wherein the elastic layer comprises at least one rubber material as a principal component, including nitrile rubber, styrene rubber, butadiene rubber, butyl rubber, or silicone rubber, which are used alone or in combination. The elastic layer further comprises 1-50% by weight of an electroconductivity imparting agent, such as carbon black. (See abstract; Fig. 3-4; col. 8, ln. 11-67; col. 9, ln. 9-12). Masuda further teaches

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the elastic layer having a volume resistance of  $10^4$ - $10^8$  Ohm.cm (see col. 9, ln. 12-15; col. 10, ln. 48-56).

Masuda differs from the presently claimed invention because the reference does not teach the rubber material being an acrylonitrile-styrene rubber.

Niimi teaches an image formation apparatus comprising an endless belt. The belt comprises a binder resin and an electroconductive powder, such as carbon black. The binder resin includes styrene-acrylonitrile, polycarbonate, polystyrene, styrene-butadiene, silicone (see (Fig. 2-3; col. 6, ln. 38-67; col. 7, ln. 3-17).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed styrene-acrylonitrile resin or polycarbonate resin, as taught by Masuda, in the elastic layer of Niimi, and would have given the same results. This is because Niimi teaches that styrene-acrylonitrile or polycarbonate could be used as an alternative to the styrene, butadiene, or silicone resin, and substituting one for another would have given the same effects.

With respect to the amount of the second resin, Masuda teaches a blend of rubbers with at least one principal component. Thus, the second component would have been a minor component and would have been less than 50% of the principal component.

#### ***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt  
February 7, 2005

  
**THAOT. TRAN**  
**PATENT EXAMINER**